

Payson PCE

Boundaries:

The site is located in Payson, Arizona and is bounded approximately by Frontier Street to the north, Beeline Highway (State Route 87) to the east, Aero Drive to the south and McLane Road to the west.

Site History:

- In 1990, the Town of Payson (TOP) collected samples from four future production wells (TOP-4, 5, 19, and 20). Tetrachloroethene (PCE) was detected in two of the production wells (TOP-4 and 5) at 13,600 micrograms per liter *u/L* and 542 *u/L*, respectively.
- The site was identified as a potential WQARF site in 1990.
- In 1993, the ADEQ conducted a preliminary assessment/site inspection (PA/SI) which identified the Old Payson Dry Cleaners (OPDC), located at 904-906 South Beeline Highway, as a potential source of contamination.
- The OPDC operated at the 904-906 South Beeline Highway location from 1976 to 1984.
- In June 1995, ADEQ remove the septic tank system and surrounding soils as an early response action (ERA) under WQARF.
- In September 1996, the Interim Groundwater Treatment System (IGTS) was constructed to remediate groundwater at the source area.
- In August 1997, the Expanded Groundwater Treatment System (EGTS) construction began to remediate groundwater down-gradient of the source area.
- In December 1997, a 90-day operational test was conducted using the completed IGTS.
- In March 1998, a well-head treatment system was constructed at the TOP production well.
- The Payson PCE site was added to the WQARF Registry on April 28, 1998 with an eligibility and evaluation score of 63 out a possible 120.
- From 1996 to 1998, ADEQ installed groundwater monitoring wells to define the extent of groundwater contamination.
- In October 1998, the IGTS and EGTS became operational and began treating and delivering water to the TOP.

- In September 1999, three abandoned underground storage tanks (USTs) located at the source area were removed. Soil and soil vapor sampling was conducted. Three nested vapor monitoring wells were constructed and sampled.
- A soil vapor extraction (SVE) system was constructed to remediate contaminated soils in the source area in 2001 and was operated until October 2002.
- In 2001, two additional groundwater extraction wells, EX-1 and EX-2, were drilled and constructed to provide additional capture of the plume.
- In June 2002, the Remedial Investigation Report was finalized.
- In January 2003, the IGTS was turned off and the SVE system was decommissioned.
- The Feasibility Study Report was completed in May 2003.
- The Proposed Remedial Action Plan was completed and ADEQ is responding to comments.

Site Status:

- Semi-annual groundwater sampling is conducted in March and September of every year.
- The EGTS continues to operate at the site. Groundwater is treated through carbon vessels and is distributed to a holding tank at the site. To ensure compliance with drinking water standards, water samples are collected on a monthly basis from the system.
- PCE concentrations were detected at approximately 760 µg/L in December 1999 from a monitoring well close to the source area. The concentration has decreased to approximately 120 µg/L in the March 2005 sampling event.

Site Hydrogeology:

- The aquifer at the site is in the Payson Granite.
- The hydrogeology of the Payson area has been defined through the development of the Site Hydrogeologic Conceptual Model (HCM) based on drilling and testing activities.
- The HCM identified three primary hydrologic units in descending order in the Payson Granite: 1) Alluvium/Colluvium, 2) Decomposed Granite/Fractured Granite (DG/FG), and 3) Variably Fractured Granite/Competent Granite (FG/CG).
- The groundwater flow direction is west.

Contaminants:

The current contaminants of concern in groundwater include tetrachloroethene (PCE), and methyl tertiary butyl ether (MTBE). Contaminants of concern at the site may change as new data become available.

Public Health Impact:

ADEQ and the town of Payson have taken precautions to prevent public exposure to the contamination. The contaminated municipal wells have not been put into production for public supply without adequate treatment. The Arizona Department of Health Services (ADHS) has developed a "Statement of Risk" to address the risks associated with consumption of water from contaminated private wells in the area. While most of the private wells that have been found to be contaminated, contained concentrations of PCE below the Maximum Contaminant Level (MCL) (less than five micrograms per liter (*ug/l*)), the owners of these wells have been advised that continued use of the water is not recommended. In March 1997, the site boundaries were expanded to include additional private domestic wells located to the north and south of the site. Several of these wells were found to be contaminated with PCE above the MCL. ADEQ informed the owners that drinking the well water could be unhealthy, and that ADEQ would provide a temporary supply of bottled water for the owners use until the owners could secure an alternative supply. Currently all domestic wells are either below MCL, dry due to a decline in groundwater elevation, or are no longer in use as the owners have connected to the Town of Payson water system.

Community Involvement Activities:

A community advisory board (CAB) has been formed for the site in conjunction with the Tonto and Cherry site and meets on a regular basis. These meetings are open to the public. The CAB meeting agendas and minutes can be viewed at: <http://azdeq.gov/enviro/waste/sps/reg.html>. A fact sheet was distributed to the community involvement area in November 2002.

Information Repositories:

Interested parties can review site information at the information repository located at the Payson Public Library located at 328 N. McLane Road, (928) 474-9260. Site information is also available for review at the ADEQ main office located at 1110 West Washington Street, Phoenix. With 24 hour notice, an appointment to review relating documentation is available Monday through Friday from 8:30 a.m. to 4:30 p.m., at the ADEQ Records Management Center, 1110 W. Washington Street in Phoenix, Arizona. Please contact (602) 771-4380 or (800) 234-5677 to schedule an appointment to review these documents.

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*In Arizona, but outside the Phoenix area, call toll-free at (800) 234-5677.